

## ABSTRACT OF THE DISCLOSURE

The present invention relates to methods of preparing biological material, for use in  
5 various experimental, diagnostic or therapeutic uses, including immunotherapy treatment or  
prophylaxy of tumors. More particularly, the present invention relates to methods of preparing  
membrane vesicles (in particular exosomes) released by various types of mammalian cells,  
comprising diafiltration and/or density cushion centrifugation. The invention also provides novel  
methods for characterizing and analyzing exosome preparations, which can be used in quality  
10 control assay for the purpose of pharmaceutical product production. The invention is suitable to  
produce pharmaceutical grade preparations of such membrane vesicles and to fully characterize  
said preparations, for use in human beings.